

ABSTRACT OF THE DISCLOSURE

1 A solid-state image pickup apparatus capable of performing,
for instance, AE control by means of an image signal containing
all colors used for color separation in photosensitive cells
5 arranged in a honeycomb-like structure, and signal reading
out method therefor. A digital still camera supplies a signal
in a mode set by a mode setting section to a system control
section. Upon receiving the signal, the system control section
controls a drive signal generation section to generate a drive
10 signal. Incident lights are supplied onto an image pickup
section through color separation filters having filter segments
of identical colors arranged in a column direction. The image
pickup section photoelectrically converts the lights incident
to the respective photosensitive cells. A drive signal
15 generated by the drive signal generation section according
to the specified mode is supplied to a signal reading out gate,
so that a transfer for the signal charges is performed. In
this case, signals for all the colors are read out in response
to the drive signal in compliance with the color filter
20 arrangement of the color separation filters. The signals read
out are used by AF and AE adjustment sections for appropriate
controls.